**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1          1.     (Currently amended)  A method comprising:

2          serially receiving, from a source, a plurality of forward messages each addressed

3  to a corresponding destination among a plurality of destinations;

4          storing each forward message before attempting to send the forward message to

5  its corresponding destination;

6          for each stored forward message, receiving an ~~plurality of~~ availability signals~~,~~

7  ~~each availability signal~~ indicating ~~that~~ whether its corresponding destination is available to

8  accept ~~one of the destinations is available to accept its corresponding~~ the stored forward message

9  before attempting to send the stored forward message to its corresponding destination;

10         for first stored forward messages whose corresponding first destinations are

11  available, simultaneously sending the first stored forward messages to their corresponding first

12  destinations, wherein a stored forward message is sent only to its corresponding destination and

13  not until after receiving an availability signal indicating that the destination is available;

14         subsequent to ~~receiving~~ sending the first stored forward messages, simultaneously

15  receiving, after a predetermined period of time, a plurality of reverse messages from the first

16  destinations, each reverse message corresponding to one of the first stored forward messages;

17  and

18         serially sending the reverse messages to the source.

1          2.     (Currently amended)  The method of claim 1, wherein the source identifies

2  each of the forward messages by a different tag, further comprising:

3         placing a tag in a delay buffer when sending to a destination the forward message

4  identified by that tag, wherein the delay buffer implements a delay equal to the predetermined

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5    period of time such that the tag is available when receiving from the destination memory the

6    reverse message corresponding to the forward message; and

7            sending the tag to the source with the reverse message, whereby the source

8    associates the reverse message with the forward message.


1        3.      (Original)  The method of claim 1, further comprising:

2            associating a priority with each forward message; and

3            sending a forward message to a destination when that forward message has a

4    higher priority than other forward messages addressed to that destination.


1        4.      (Original)  The method of claim 3, wherein the priority of each forward

2    message represents an age of that forward message.


1        5.      (Previously presented)  The method of claim 1, further comprising:

2            associated a priority with each reverse message; and

3            sending a reverse message to the source when that reverse message has a higher

4    priority than other reverse messages.


1        6.      (Original)  The method of claim 5, wherein the priority of each reverse

2    message represents an age of that reverse message.


1        7.      (Original)  The method of claim 1, wherein each destination is a memory

2    bank, each forward message is a memory transaction, and each reverse message is the result of

3    one of the memory transaction.


1        8.      (Currently amended)  An apparatus comprising:

2            means for serially receiving, from a source, a plurality of forward messages each

3    addressed to a corresponding destination among a plurality of destinations;

4            means for storing each forward message before attempting to send the forward

5    message to its corresponding destination;

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6        means for receiving a~~n~~ ~~plurality of~~ availability signals~~,~~ for each stored forward

7    message ~~each availability signal~~ indicating ~~that one of the~~ whether its corresponding destinations

8    is available to accept the stored forward message before attempting to send the stored forward

9    message to its corresponding destination~~its corresponding forward message~~;

10        means for simultaneously sending first stored forward messages to their

11    corresponding first destinations, wherein a stored forward message is sent only to its

12    corresponding destination and not until after receiving an availability signal indicating that the

13    destination is available~~wherein the first destinations are determined to be available based on the~~

14    ~~availability signals~~;

15        means for simultaneously receiving, after a predetermined period of time, a

16    plurality of reverse messages from the first destinations, each reverse message corresponding to

17    one of the first stored forward messages; and

18        means for serially sending the reverse messages to the source.

1        9.    (Currently amended)  The apparatus of claim 8, wherein the source

2    identifies each of the forward messages by a different tag, further comprising:

3        means for placing a tag in a delay buffer when sending to a destination the

4    forward message identified by that tag, where the delay buffer implements a delay equal to the

5    predetermined period of time such that the tag is available when receiving from ~~memory~~ the

6    destination the reverse message corresponding to the forward message; and

7        means for sending the tag to the source with the reverse message, whereby the

8    source associates the reverse message with the forward message.

1        10.    (Original)  The apparatus of claim 8, further comprising:

2        means for associating a priority with each forward message; and

3        means for sending a forward message to a destination when that forward message

4    has a higher priority than other forward messages addressed to that destination.

1     11.  (Original)  The apparatus of claim 10, wherein the priority of each forward

2 message represents an age of that forward message.

1     12.  (Previously presented)  The apparatus of claim 8, further comprising:

2     means for associated a priority with each reverse message; and

3     means for sending a reverse message to the source when that reverse message has

4 a higher priority than other reverse messages.

1     13.  (Original)  The apparatus of claim 12, wherein the priority of each reverse

2 message represents an age of that reverse message.

1     14.  (Original)  The apparatus of claim 8, wherein each destination is a

2 memory bank, each forward message is a memory transaction, and each reverse message is the

3 result of one of the memory transactions.

1     15.  (Currently amended)  A computer program product, tangibly stored on a

2 computer-readable medium, comprising instructions operable to cause a programmable processor

3 to:

4     serially receive, from a source, a plurality of forward messages each addressed to

5 a corresponding destination among a plurality of destinations;

6     store each forward message before attempting to send the forward message to its

7 corresponding destination;

8     receive an ~~plurality of~~ availability signals for each stored forward message, ~~each~~

9 ~~availability signal~~ indicating ~~that one of the~~ whether its corresponding destinations is available to

10 accept ~~its corresponding~~ the stored forward message before attempting to send the stored forward

11 message to its corresponding destination;

12     for first stored forward messages whose corresponding first destinations are

13 available, simultaneously send the first stored forward messages to their corresponding first

14    destinations, wherein a stored forward message is sent only to its corresponding destination and

15    not until after receiving an availability signal indicating that the destination is available;

16                    simultaneously receive, after a predetermined period of time, a plurality of reverse

17    messages from the first destinations, each reverse message corresponding to one of the first

18    stored forward messages; and

19                    serially send the reverse messages to the source.

1              16.    (Currently amended)  The computer program product of claim 15, wherein

2    the source identifies each of the forward messages by a different tag, further comprising

3    instructions operable to cause a programmable processor to:

4                    place a tag in a delay buffer when sending to a destination the forward message

5    identified by that tag, wherein the delay buffer implements a delay equal to the predetermined

6    period of time such that the tag is available when receiving from memory the destination the

7    reverse message corresponding to the forward message; and

8                    send the tag to the source with the reverse message, whereby the source associates

9    the reverse message with the forward message.

1              17.    (Original)  The computer program product of claim 15, further comprising

2    instructions operable to cause a programmable processor to:

3                    associate a priority with each forward message; and

4                    send a forward message to a destination when that forward message has a higher

5    priority than other forward messages addressed to that destination.

1              18.    (Original)  The computer program product of claim 17, wherein the

2    priority of each forward message represents an age of that forward message.

1              19.    (Previously presented)  The computer program product of claim 15,

2    further comprising instructions operable to cause a programmable processor to:

3                    associate a priority with each reverse message; and

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4          send a reverse message to the source when that reverse message has a higher

5     priority than other reverse messages.

6          20.     (Original)  The computer program product of claim 19, wherein the

7     priority of each reverse message represents an age of that reverse message.

8          21.     (Original)  The computer program product of claim 15, wherein each

9     destination is a memory bank, each forward message is a memory transaction, and each reverse

10    message is the result of one of the memory transactions.